



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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SEP 04 2003

In re application of:

Sorrells *et al.*

Art Unit: 2681

Appl. No. 09/550,644

Examiner: Gelin, J.

Technology Center 2600

Filed: April 14, 2000

Atty. Docket: 1744.0010009

For: **Method and System for Down-  
Converting an Electromagnetic  
Signal, Transforms for Same,  
and Aperture Relationships**

**Fifth Supplemental Information Disclosure Statement**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The reference numbering on the accompanying Form PTO-1449 for this Fifth Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Fourth Supplemental Information Disclosure Statement filed on July 23, 2003 in connection with the above-captioned application.

Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may

not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

Applicants provide the following comments regarding the documents:

Documents AE53-AH53 were cited in an International Search Report in PCT Application No. PCT/US02/35861, filed November 8, 2002, entitled, "Method and Apparatus for Reducing DC Offsets in a Communication System," directed to related subject matter. Also cited in said search report were U.S. Patent Nos. 5,389,839 and 5,898,912, which have already been cited in the present application in the Fourth Supplemental Information Disclosure Statement, filed July 23, 2003.

Documents AI53 and AA54-AF54 were cited in an Office Action in co-pending U.S. Patent Application No. 09/476,093, filed January 3, 2000, entitled "Communication System with Multi-Mode and Multi-Band Functionality and Embodiments Thereof, Such as the Family Radio Service," directed to related subject matter.

Documents AG54-AI54 and AA55 were cited in an International Search Report in PCT Appl. No. PCT/US03/16403, filed May 27, 2003, entitled "Method and Apparatus for DC Offset Removal in a Radio Frequency Communication Channel," directed to related subject matter.

Document AK23 was cited in an Office Action in co-pending Japanese Patent Application No. 2000-577764, filed October 18, 1999, entitled "Applications of Universal Frequency Translation," directed to related subject matter.

This statement should not be construed as a representation that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below.

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.
- ☒ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.
- ☐ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.
  - ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
  - ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
  - ☐ c. Attached is our PTO-2038 Credit Card Payment Form [**OR**] Check No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ in payment of the fee under 37 C.F.R. § 1.17(p).

- ☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our Check No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:
- ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.
- 6. A concise explanation of the relevance of the non-English language document appears below:
- Document AK23 (JP 9-36664) appears to describe a frequency conversion circuit. An English-language abstract of document AK23 is enclosed, listed as document AR58 on the accompanying form PTO-1449.
- ☐ 7. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. \_\_\_\_\_,

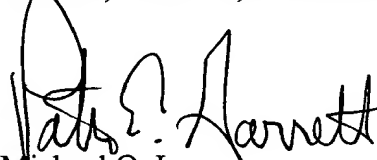
filed \_\_\_\_\_, which is relied upon for an earlier filing date under 35  
U.S.C. § 120. Thus, copies of these documents are not attached. 37  
C.F.R. § 1.98(d).

It is respectfully requested that the Examiner initial and return a copy of the  
enclosed PTO-1449, and indicate in the official file wrapper of this patent application that  
the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee  
deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

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Attorney for Applicants  
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Date: 9/3/03

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\*Admitted only in Maryland  
\*Admitted only in Virginia  
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Federal Agencies

September 3, 2003

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**Mail Stop: Art Unit 2681**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Re: U.S. Non-Provisional Utility Patent Application  
Appl. No. 09/550,644; Filed: April 14, 2000  
For: **Method and System for Down-Converting an Electromagnetic  
Signal, Transforms for Same, and Aperture Relationships**  
Inventors: Sorrells *et al.*  
Our Ref: 1744.0010009

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Fifth Supplemental Information Disclosure Statement;
2. A listing of the cited documents on Form PTO-1449 (3 pages);
3. Copies of seventeen (17) cited documents; and
4. One (1) return postcard.

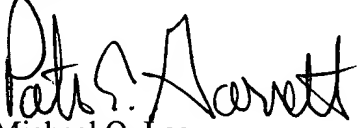
It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents  
September 3, 2003  
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

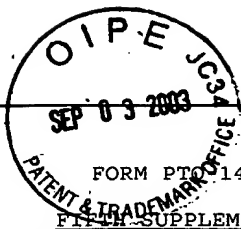
Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

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Michael Q. Lee  
Attorney for Applicants  
Registration No. 35,239

MQL/VLB/mhd  
Enclosures

SKGF\_DC1:173960.1



FORM PT-1449 FILING SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 1744.0010009	APPLICATION NO. 09/550,654
	APPLICANT Sorrells et al.	
	FILING DATE April 14, 2000	GROUP 2681

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AE53	5,751,154	05/1998	Tsugai			
	AF53	5,793,817	08/1998	Wilson			
	AG53	6,225,848 B1	05/2001	Tilley et al.			
	AH53	6,313,685 B1	11/2001	Rabii			
	AI53	3,614,627	10/1971	Runyan et al.			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AK23	JP 9-36664	02/1997	JP			No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	58	English-language abstract for Japanese Patent Application Publication Number. JP 09-036664, from <a href="http://www19.ipdl.jpo.go.jp">http://www19.ipdl.jpo.go.jp</a> , 2 pages (Date of publication of application - February 7, 1997).

EXAMINER

DATE CONSIDERED

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449

FIFTH SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1744.0010009APPLICATION NO.  
09/550,644APPLICANT  
Sorrells et al.FILING DATE  
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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA54	3,940,697	02/1976	Morgan			
	AB54	4,016,366	04/1977	Kurata			
	AC54	4,045,740	08/1977	Baker			
	AD54	4,115,737	09/1978	Hongu <i>et al.</i>			
	AE54	5,710,992	01/1998	Sawada <i>et al.</i>			
	AF54	5,790,587	08/1998	Smith <i>et al.</i>			
	AG54	4,740,675	04/1988	Brosnan <i>et al.</i>			
	AH54	5,483,600	01/1996	Werrbach			
	AI54	6,011,435	01/2000	Takeyabu <i>et al.</i>			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)


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FORM PTO-1449

FIFTH SUPPLEMENTARY  
INFORMATION DISCLOSURE STATEMENT

SEP 03 2003

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SEP 03 2003  
3034 3034  
PATENT & TRADEMARK OFFICEATTY. DOCKET NO.  
1744.0010009APPLICATION NO.  
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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA55	6,321,073 B1	11/2001	Luz et al.			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)


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